



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

AUG 3 2009

REPLY TO THE ATTENTION OF

AE-17J

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Todd Siebenaler, Plant Manager  
Spectro Alloys Corporation  
13220 Doyle Path  
Rosemount, Minnesota 55068

Re: Finding of Violation at Spectro Alloys Corporation, Rosemount, Minnesota

Dear Mr. Siebenaler:

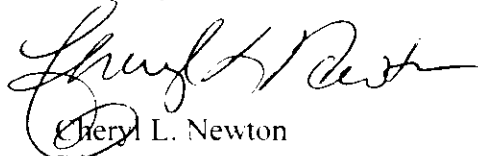
This is to advise you that the U. S. Environmental Protection Agency has determined that the Spectro Alloys (Spectro) facility at 13220 Doyle Path, Rosemount, Minnesota is in violation of the Clean Air Act (CAA), 42 U.S.C. § 7412 and associated pollution control requirements. A list of the requirements violated is provided below. We are today issuing to you a Finding of Violation (FOV) for these violations.

After reviewing Spectro's responses to the May 18, 2009 EPA information request, EPA finds Spectro to be in violation of the CAA and its implementing regulations at 40 C.F.R. § 63.1500 *et seq.* A list of the requirements violated is provided below. We are today issuing to you a Finding of Violation (FOV) for these violations pursuant to Sections 113(a)(3) of the CAA, 42 U.S.C. §§ 7413(a)(3).

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. EPA is providing you with the opportunity to request a conference with us about the violations alleged in the FOV. A conference should be requested within 10 days following receipt of this notice and any conference should be held within 30 days following receipt of this notice. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent you at this conference.

The EPA contact in this matter is Gina Harrison. You may call her at (312) 353-6956 if you wish to request a conference. EPA hopes that this FOV will encourage Spectro's compliance with the requirements of the CAA.

Sincerely,

A handwritten signature in black ink, appearing to read "Cheryl L. Newton". The signature is fluid and cursive, with a large initial "C" and "N".

Cheryl L. Newton  
Director  
Air and Radiation Division

**United States Environmental Protection Agency  
Region 5**

<b>IN THE MATTER OF:</b>	)	
	)	
<b>Spectro Alloys</b>	)	<b>FINDING OF VIOLATION</b>
<b>Rosemount, Minnesota</b>	)	
	)	<b>EPA-5-09-MN-09</b>
	)	
<b>Proceedings Pursuant to</b>	)	
<b>the Clean Air Act,</b>	)	
<b>42 U.S.C. §§ 7401 et seq.</b>	)	

**FINDING OF VIOLATION**

This Finding of Violation is issued pursuant to Section 113 (a)(3) of the CAA, 42 U.S.C. § 7413 (a)(3). The U.S. Environmental Protection Agency finds that Spectro Alloys (Spectro) is violating the CAA and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production at 40 C.F.R. part 63, subpart RRR, as promulgated pursuant to Section 112 of the Act, 42 U.S.C. § 7412.

**Applicable Regulations**

1. Under Section 112 of the CAA, the Administrator of EPA promulgated the NESHAP for Secondary Aluminum Production at 40 C.F.R. § 63.1500 et seq.
2. A group 1 furnace, as that term is defined at 40 C.F.R. § 63.1503, means a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes clean charge with reactive fluxing.
3. Pursuant to the NESHAP at 40 C.F.R. § 63.1501, the owner or operator of an existing affected source must comply with the requirements of Subpart RRR by March 24, 2003; and the owner or operator of a new affected source that commences construction or reconstruction after February 11, 1999, must comply with the requirements by March 24, 2000, or upon startup, whichever is later.
4. The NESHAP, at 40 C.F.R. § 63.1506 (a), requires the owner or operator to operate all new and existing affected sources and control equipment according to the requirements in 40 C.F.R. § 63.1506.

5. The NESHAP, at 40 C.F.R. § 63.1510 (g) (1) and (2), requires that the owner or operator of an affected source using an afterburner to comply must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner and, among other things, the temperature monitoring system must record temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.
6. The NESHAP, at 40 C.F.R. § 63.1510 (g)(3), requires that the owner or operator of an affected source using an afterburner to comply with the requirements of Subpart RRR must conduct an inspection of each afterburner at least once a year and record the results.
7. The NESHAP, at 40 C.F.R. § 63.1506 (g)(1)(i), requires that each owner or operator of an affected scrap dryer/delacquering kiln/decoating kiln with emissions controlled by an afterburner maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test.
8. The NESHAP, at 40 C.F.R. § 63.1510 (h)(1), requires each owner or operator of an affected scrap dryer/delacquering kiln/decoating kiln or a group 1 furnace using a lime-injected fabric filter install, calibrate, maintain, and operate a device to continuously monitor and record the temperature of the fabric filter inlet gases.
9. The NESHAP, at 40 C.F.R. § 63.1510 (f), requires that each owner or operator of an affected source or emission unit using a fabric filter or lime-injected fabric filter to comply with the requirements of Subpart RRR must install, calibrate, maintain, and continuously operate a bag leak detection system.
10. The NESHAP, at 40 C.F.R. § 63.1506 (g)(4) and 40 C.F.R. § 63.1506 (m)(3), requires each owner or operator of an affected scrap dryer/delacquering kiln/decoating kiln or group 1 furnace with emissions controlled by a lime-injected fabric filter to maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 25°F.
11. The NESHAP, at 40 C.F.R. § 63.1510 (j), requires that each owner or operator of an affected group 1 furnace must calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512.
12. The NESHAP, at 40 C.F.R. § 63.1505 (c)(iv), provides that owners or operators of affected scrap dryers/delacquering kilns/decoating kilns which are equipped with an afterburner must not discharge or cause to be discharged to the atmosphere emissions in excess of 0.75 kg of hydrochloric acid (HCl) per Mg, (1.50 lb per ton) of feed/charge.
13. The NESHAP, at 40 C.F.R. § 63.1511 (e), requires that each owner or operator of affected

sources and emission units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

14. The NESHAP, at 40 C.F.R. § 63.1512 (c), requires that each owner or operator of affected scrap dryers must conduct performance tests to measure emissions of total hydrocarbons (THC), dioxins and furans (D/F), HCl, and particulate matter (PM) at the outlet of the control device.
15. The NESHAP, at 40 C.F.R. § 63.1506 (m)(5), requires that each owner or operator of an affected group 1 furnace with emissions controlled by a lime-injected fabric filter must maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
16. The NESHAP, at 40 C.F.R. § 63.1518, states that the requirements of the general provisions in 40 C.F.R. Part 63, Subpart A which are applicable to the owner or operator subject to 40 C.F.R. Part 63, Subpart RRR are shown in Appendix A to 40 C.F.R. Part 63, Subpart RRR.
17. Appendix A to 40 C.F.R. Part 63, Subpart RRR indicates that 40 C.F.R. § 63.8 (c)(4) applies to those subject to 40 C.F.R. Part 63, Subpart RRR.
18. The NESHAP, at 40 C.F.R. § 63.8 (c)(4) provides that with the exception of system breakdowns, repairs, calibration checks, and zero and span adjustments required, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements.

### **Factual Background**

19. At all times relevant to this notice, Spectro Alloys Corporation owns and operates a secondary aluminum production facility at 13220 Doyle Path, Rosemount, MN. Spectro Alloys Corporation uses aluminum scrap and dross in its aluminum production processes.
20. At the facility, Spectro owns and operates two furnaces and two scrap dryers which were constructed prior to February 11, 1999, known as Furnaces #1 and #3 and Scrap Dryers #1 and #3. The group 1 furnaces use a chlorine flux to reduce the amount of magnesium in the product and are vented to a common control device.
21. Spectro Alloys Corporation's facility is an emission source subject to the requirements of the Act, including 40 C.F.R. Part 63, Subpart RRR.
22. The facility is a "major source" as that term is defined at 40 C.F.R. § 63.2.
23. Spectro's Furnaces #1 and #3 and Scrap Dryers #1 and #3 are "group 1 furnaces" and "scrap

dryers" respectively, as those terms are defined at 40 C.F.R. § 63.1503.

24. Spectro's Furnaces #1 and #3 are equipped with a "fabric filter" and use "lime-injection" as those terms are defined at 40 C.F.R. § 63.1503.
25. Spectro's Scrap Dryers #1 and #3 are equipped with an "afterburner" and "fabric filter," and use "lime-injection" as those terms are defined at 40 C.F.R. § 63.1503.
26. On September 29, 2004, EPA filed an administrative complaint against Spectro, indicating that Spectro violated emissions standards and recordkeeping requirements. Among other things, the complaint alleged failure to monitor and record scrap dryer afterburner temperature, fabric filter inlet temperature, and chlorine injection rate of its furnaces.
27. On March 25, 2005, EPA executed a Consent Agreement and Final Order by signature of the Regional Administrator, Region 5. Spectro consented to this Order on April 21, 2005, by signature of the Company President.
28. On February 9, 2007, EPA issued a Finding of Violation to Spectro, indicating that Spectro violated emissions standards and recordkeeping requirements. Among other things, the Finding alleged failure to maintain afterburner inspection records and exceedance of dioxin/furan emission rates from Spectro's furnaces.
29. On September 21, 2007, EPA executed a Consent Agreement and Final Order by signature of the Regional Administrator, Region 5. Spectro consented to this Order on October 19, 2007, by signature of the Company President.
30. The average baghouse inlet temperature established during Spectro's February 11-14, 2003 performance test of Scrap Dryer #1 plus 25°F was 395°F, and the average afterburner operating temperature established during this test was 1456°F.
31. The average baghouse inlet temperature established during Spectro's February 11-14, 2003 performance test of Furnaces #1 and #3 plus 25°F was 167°F, and the maximum reactive chlorine flux injection rate established during this test was 1157 lbs/hr.
32. The average baghouse inlet temperature established during Spectro's February 5-6 2004 performance test of Scrap Dryer #1 plus 25°F was 426°F, and the average afterburner operating temperature established during this test was 1450°F.
33. The average baghouse inlet temperature established during Spectro's March 4, 2004 performance test of Furnaces #1 and #2 was 227°F, and the maximum reactive chlorine flux injection rate established during this test was 955 lbs/hr.
34. The average baghouse inlet temperature established during Spectro's July 1-2, 2004 performance test of Scrap Dryer #1 was 404°F and the average afterburner operating

temperature established during this test was 1499°F.

35. The average baghouse inlet temperature established during Spectro's August 29, 2006 performance test of Furnaces #1 and #2 was 268°F, and the maximum reactive chlorine flux injection rate established during this test was 1082 lbs/hr.
36. The average baghouse inlet temperature established during Spectro's May 1-2, 2007 performance test of Furnaces #1 and #3 was 220°F, and the maximum reactive chlorine flux injection rate established during this test was 941 lbs/hour.
37. The average baghouse inlet temperature established during Spectro's January 29-31, 2008 performance test of Scrap Dryer #3 was 405°F and the average afterburner operating temperature established during this test was 1450°F.
38. In accordance with its permit and the NESHAP at 40 C.F.R. 63.1511 (e), Spectro conducted a performance test on Scrap Dryer #1 on February 3-4, 2009, and submitted a test report to EPA and MPCA on March 16, 2009. Results of this test showed HCl emissions of 1.58 lbs/ton of feed/charge.
39. EPA conducted an inspection at the facility on May 7, 2008.
40. EPA sent an information request to the facility on May 21, 2008, February 26, 2009, and May 18, 2009. Among other things, EPA required Spectro to send afterburner inspection records and copies of previously submitted semi-annual excess emission and startup, shutdown, malfunction (SSM) reports.
41. On February 26, 2009, EPA issued a Finding of Violation to Spectro, indicating that Spectro violated emissions standards and operational requirements.
42. In its May 18, 2009 response to EPA, Spectro indicated it had not retained records of its 2008 afterburner inspection. Spectro also submitted copies of all semi-annual excess emission and startup, shutdown, and malfunction reports submitted to MPCA and EPA for the period March 23, 2004, to September 23, 2007. These reports include monitoring results for several parameters including afterburner and fabric filter inlet temperatures and chlorine flux injection rates. These results are included in this Finding as Table A.

#### **Violations of Emission Standards and Monitoring Requirements**

43. Spectro's excess HCl emissions from Scrap Dryer #1 are violations of 40 C.F.R. § 63.1505 (e)(iv).
44. Spectro's failure to inspect its afterburner in 2008 and maintain records of inspection results is a violation of 40 C.F.R. § 63.1510 (g)(3).
45. From March 23, 2004 - March 23, 2007, Spectro's afterburner data recorders for Scrap

Dryer #1 and #3 failed on 497 occasions causing the operating temperature of the afterburner not to be recorded, in violation of 40 C.F.R. § 63.1510 (g)(2) and 40 C.F.R. § 63.8 (c)(4).

46. From March 23, 2004 - March 23, 2007, Spectro recorded 400 instances when operating temperatures for Scrap Dryers #1 and #3 afterburners were less than applicable limits, in violation of 40 C.F.R. § 63.1506 (g)(1)(i).
47. From March 23, 2004 - March 23, 2007, Spectro recorded 7,851 instances when the fabric filter inlet temperatures for Furnaces #1 and #3 were greater than applicable limits, in violation of 40 C.F.R. § 63.1506 (m)(3), and 40 C.F.R. § 63.6 (c).
48. From March 23, 2004 - March 23, 2007, Spectro's fabric filter temperature recorders for Scrap Dryer #1 and #3 failed on 497 occasions causing the operating temperature of the baghouse not to be recorded, in violation of 40 C.F.R. § 63.1510 (h)(1) and 40 C.F.R. § 63.8 (c)(4).
49. From March 23, 2004 - March 23, 2007, Spectro recorded 243 instances when the fabric filter inlet temperatures for Scrap Dryers #1 and #3 were greater than applicable limits, in violation of 40 C.F.R. § 63.1506 (g)(4).
50. From March 23, 2004 - March 23, 2007, Spectro's Furnaces #1 and #3 chlorine injection data recorder failed on 58 occasions causing the rate of reactive flux injection not to be recorded, in violation of 40 C.F.R. § 63.1510 (j) and 40 C.F.R. § 63.8 (c)(4).
51. From March 23, 2004 - March 23, 2007, Spectro recorded 37 instances when chlorine injection rates for Furnaces #1 and #3 were greater than applicable limits for 3-hour block averages, in violation of 40 C.F.R. § 63.1506 (m)(5).
52. From March 23, 2004 - March 23, 2007, Spectro's bag leak detection monitors failed on more than 1,721 occasions causing bag leaks not to be detected or recorded at Scrap Dryers #1 and #3 and the hammermill, in violation of 40 C.F.R. § 63.1510 (f) and 40 C.F.R. § 63.8 (c)(4).



### **Environmental Impact of Violations**

53. Excess emissions of hydrogen chloride, dioxins, and furans increases public exposure to potentially life-threatening mutagens and carcinogens. Long term exposure to dioxin has additionally been linked to many health problems, including birth defects, inability to maintain pregnancy, decreased fertility, reduced sperm counts, endometriosis, diabetes, learning disabilities, immune system suppression, lung problems, skin disorders, lowered testosterone levels and much more.

8/3/09  
Date

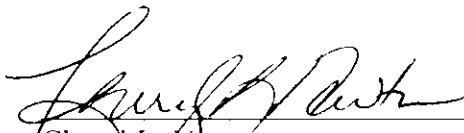
  
Cheryl L. Newton  
Director  
Air and Radiation Division

Table A (1-6): Spectro Alloys March 23, 2004 - March 23, 2007 Semi Annual Excess Emission and Startup, Shutdown, Malfunction Report: Summary of Deviations and Monitor Downtime.

Table A:

1. Spectro Alloys March 23, 2004 - September 23, 2004 Semi Annual Excess Emission and Startup, Shutdown, Malfunction Report.

Monitor ID	Parameter Monitored	Total Number of Readings Taken	Total Number of Readings Missed	Total Number of Readings Indicating Deviations
MR005	Dryer 3 Afterburner Temperature	1176	0	65
MR006	Dryer 1 Afterburner Temperature	603	398	116
MR007	Furnaces 1 and 3 Baghouse Inlet Temperature	1478	1	1289
MR008	Dryer 3 Baghouse Inlet Temperature	1176	0	203
MR009	Dryer 1 Baghouse Inlet Temperature	603	398	22
MR010	Furnaces 1 and 3 Chlorine Injection Rate	1472	8	0
MR004	Bag Leak Detection: Dryer #1	1532.5	1195	0

2. Spectro Alloys September 23, 2004 - March 23, 2005 Semi Annual Excess Emission and Startup, Shutdown, Malfunction Report.

Monitor ID	Parameter Monitored	Total Number of Readings Taken	Total Number of Readings Missed	Total Number of Readings Indicating Deviations
MR005	Dryer 3 Afterburner Temperature	1327	54	32
MR006	Dryer 1 Afterburner Temperature	1164	14	171
MR007	Furnaces 1 and 3 Baghouse Inlet Temperature	1455	2	1243
MR008	Dryer 3 Baghouse Inlet Temperature	1327	54	0
MR009	Dryer 1 Baghouse Inlet Temperature	1164	14	6
MR010	Furnaces 1 and 3 Chlorine Injection Rate	1406	5	0

MR003	Bag Leak Detection; Dryer #3	3251	165	0
MR004	Bag Leak Detection; Hammermill	2551	361	0

3. Spectro Alloys March 23, 2005 - September 23, 2005 Semi Annual Excess Emission and Startup, Shutdown, Malfunction Report.

Monitor ID	Parameter Monitored	Total Number of Readings Taken	Total Number of Readings Missed	Total Number of Readings Indicating Deviations
MR005	Dryer 3 Afterburner Temperature	1137	9	0
MR006	Dryer 1 Afterburner Temperature	1061	0	1
MR007	Furnaces 1 and 3 Baghouse Inlet Temperature	1480	0	1335
MR008	Dryer 3 Baghouse Inlet Temperature	1137	9	0
MR009	Dryer 1 Baghouse Inlet Temperature	1061	0	4
MR010	Furnaces 1 and 3 Chlorine Injection Rate	1258	0	2

4. Spectro Alloys September 23, 2005 - March 23, 2006 Semi Annual Excess Emission and Startup, Shutdown, Malfunction Report.

Monitor ID	Parameter Monitored	Total Number of Readings Taken	Total Number of Readings Missed	Total Number of Readings Indicating Deviations
MR005	Dryer 3 Afterburner Temperature	1338	10	0
MR006	Dryer 1 Afterburner Temperature	1225	0	3
MR007	Furnaces 1 and 3 Baghouse Inlet Temperature	1456	0	1309
MR008	Dryer 3 Baghouse Inlet Temperature	1338	10	1
MR009	Dryer 1 Baghouse Inlet Temperature	1225	0	7
MR010	Furnaces 1 and 3	1431	32	3

	Chlorine Injection Rate			
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5. Spectro Alloys March 23, 2006 - September 23, 2006 Semi Annual Excess Emission and Startup, Shutdown, Malfunction Report.

Monitor ID	Parameter Monitored	Total Number of Readings Taken	Total Number of Readings Missed	Total Number of Readings Indicating Deviations
MR005	Dryer 3 Afterburner Temperature	1206	10	0
MR006	Dryer 1 Afterburner Temperature	1304	0	0
MR007	Furnaces 1 and 3 Baghouse Inlet Temperature	1479	1	1357
MR008	Dryer 3 Baghouse Inlet Temperature	1206	10	0
MR009	Dryer 1 Baghouse Inlet Temperature	1304	0	0
MR010	Furnaces 1 and 3 Chlorine Injection Rate	1387	13	8

6. Spectro Alloys September 23, 2006 - March 23, 2007 Semi Annual Excess Emission and Startup, Shutdown, Malfunction Report.

Monitor ID	Parameter Monitored	Total Number of Readings Taken	Total Number of Readings Missed	Total Number of Readings Indicating Deviations
MR005	Dryer 3 Afterburner Temperature	1376	2	0
MR006	Dryer 1 Afterburner Temperature	1263	0	12
MR007	Furnaces 1 and 3 Baghouse Inlet Temperature	1456	0	1318
MR008	Dryer 3 Baghouse Inlet Temperature	1376	2	0
MR009	Dryer 1 Baghouse Inlet Temperature	1263	0	0
MR010	Furnaces 1 and 3 Chlorine Injection Rate	1407	0	24

## CERTIFICATE OF MAILING


I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-09-MN-09, by Certified Mail, Return Receipt Requested, to:

Todd Siebenaler, Plant Manager  
Spectro Alloys  
13220 Doyle Path  
Rosemount, Minnesota 55068

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

Katie Koelfgen, Air Compliance and Enforcement Unit Supervisor  
Minnesota Pollution Control Agency  
520 Lafayette Road  
St. Paul, Minnesota 55155-4194

on the 4 day of August, 2009.

  
Loretta Shaffer, Secretary  
AECAS, MN/OH

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 0192 1659